



MERCHANT & GOULD P.C. P.C.

#3

United States Patent Application
DECLARATION UNDER 37 C.F.R. § 1.63

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: SINGLE-STRANDED END-CAPPED OLIGONUCLEOTIDE MEDIATED TARGETED GENE REPAIR AND MODIFICATION AND USES THEREOF

The specification of which

- a. ☐ is attached hereto
b. ☒ was filed on January 23, 2001 as application serial no. 09/767,775, which I have reviewed and for which I solicit a United States patent.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

- a. ☐ no such applications have been filed.
b. ☒ such applications have been filed as follows:

FOREIGN APPLICATION(S), IF ANY, CLAIMING PRIORITY UNDER 35 USC § 119			
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)
Europe	97952611.8	19 December 1997	Pending
Australia	56182/98	19 December 1997	Pending
Canada	2,275,474	19 December 1997	Pending
Japan	529047/1998	19 December 1997	Pending
ALL FOREIGN APPLICATION(S), IF ANY, FILED BEFORE THE PRIORITY APPLICATION(S)			
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)

I hereby claim the benefit under Title 35, United States Code, § 120/365 of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. APPLICATION NUMBER	DATE OF FILING (day, month, year)	STATUS (patented, pending, abandoned)
09/336,655	April 19, 2000	Pending
PCT/US97/23781	December 20, 1997	Pending

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

U.S. PROVISIONAL APPLICATION NUMBER	DATE OF FILING (Day, Month, Year)
60/033,820	December 20, 1996

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56 (reprinted below).

§ 1.56 Duty to disclose information material to patentability.

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
 - (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.
- (b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

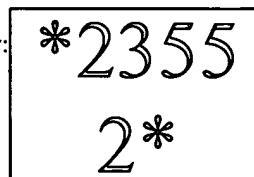
- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim;
- or
- (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

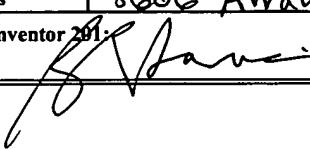
- (c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:
- (1) Each inventor named in the application;
 - (2) Each attorney or agent who prepares or prosecutes the application; and
 - (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.
- (d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.
- (e) In any continuation-in-part application, the duty under this section includes the duty to disclose to the Office all information known to the person to be material to patentability, as defined in paragraph (b) of this section, which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

Please direct all correspondence in this case to Merchant & Gould P.C. at the address indicated below:

Merchant & Gould P.C.
P.O. Box 2903
Minneapolis, MN 55402-0903



I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

2	Full Name Of Inventor	Family Name Davis	First Given Name Brian	Second Given Name Ronald
0	Residence & Citizenship	City Houston, TX	State or Foreign Country USA	Country of Citizenship USA
1	Mailing Address	Address 8606 Arranmore Lane	City Houston, TX	State & Zip Code/Country USA
Signature of Inventor 201: 				Date: 6/20/07

2	Full Name Of Inventor	Family Name Brown	First Given Name David	Second Given Name Bruce
0	Residence & Citizenship	City League City 2013 Charter Pk. Ct.	State or Foreign Country TX	Country of Citizenship USA
2	Mailing Address	Address 2613 Charter Pk. Ct.	City League City TX	State & Zip Code/Country USA 77573
Signature of Inventor 202: <i>David B. Brown</i>			Date: 19 June 01	



2	Full Name Of Inventor	Family Name Carsrud	First Given Name N.D.	Second Given Name Victor
0	Residence & Citizenship	City	State or Foreign Country	Country of Citizenship USA
3	Mailing Address	Address	City	State & Zip Code/Country USA
Signature of Inventor 203: <i>N.D. Victor Carsrud</i>			Date: <i>18 June 2001</i>	





S/N 09/767775

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Brian Davis, et al.
Serial No.: 09/767775
Filed: January 23, 2001 Docket No.: 40158.1USI3
Title: SINGLE-STRANDED END-CAPPED OLIGONUCLEOTIDE
MEDIATED TARGETED GENE REPAIR AND MODIFICATION
AND USES THEREOF

POWER OF ATTORNEY

The undersigned hereby appoints:

Mayfield, Denise L.	Reg. No. 33,732	Kowalchuk, Katherine M.	Reg. No. 36,848
Albrecht, John W.	Reg. No. 40,481	Lacy, Paul E.	Reg. No. 38,946
Ali, M. Jeffer	Reg. No. 46,359	Larson, James A.	Reg. No. 40,443
Anderson, Gregg I.	Reg. No. 28,828	Leon, Andrew J.	Reg. No. 46,869
Batzli, Brian H.	Reg. No. 32,960	Leonard, Christopher J.	Reg. No. 41,940
Beard, John L.	Reg. No. 27,612	Liepa, Mara E.	Reg. No. 40,066
Berns, John M.	Reg. No. 43,496	Lindquist, Timothy A.	Reg. No. 40,701
Black, Bruce E.	Reg. No. 41,622	Lycke, Lawrence E.	Reg. No. 38,540
Branch, John W.	Reg. No. 41,633	McDonald, Daniel W.	Reg. No. 32,044
Bremer, Dennis C.	Reg. No. 40,528	McIntyre, Jr., William F.	Reg. No. 44,921
Bruess, Steven C.	Reg. No. 34,130	Mitchem, M. Todd	Reg. No. 40,731
Byrne, Linda M.	Reg. No. 32,404	Mueller, Douglas P.	Reg. No. 30,300
Campbell, Keith	Reg. No. 46,597	Nichols, A. Shane	Reg. No. 43,836
Carlson, Alan G.	Reg. No. 25,959	Parsons, Nancy J.	Reg. No. 40,364
Caspers, Philip P.	Reg. No. 33,227	Pauly, Daniel M.	Reg. No. 40,123
Chiapetta, James R.	Reg. No. 39,634	Phillips, Bryan K.	Reg. No. 46,990
Clifford, John A.	Reg. No. 30,247	Phillips, John B.	Reg. No. 37,206
Coldren, Richard J	Reg. No. 44,084	Prendergast, Paul	Reg. No. 46,068
Daignault, Ronald A.	Reg. No. 25,968	Pytel, Melissa J.	Reg. No. 41,512
Daley, Dennis R.	Reg. No. 34,994	Qualey, Terry	Reg. No. 25,148
Dalglish, Leslie E.	Reg. No. 40,579	Reich, John C.	Reg. No. 37,703
Daulton, Julie R.	Reg. No. 36,414	Reiland, Earl D.	Reg. No. 25,767
DeVries Smith, Katherine M.	Reg. No. 42,157	Roberts, Fred	Reg. No. 34,707
DiPietro, Mark J.	Reg. No. 28,707	Samuels, Lisa A.	Reg. No. 43,080
Edell, Robert T.	Reg. No. 20,187	Schmaltz, David G.	Reg. No. 39,828
Epp Ryan, Sandra	Reg. No. 39,667	Schuman, Mark D.	Reg. No. 31,197
Glance, Robert J.	Reg. No. 40,620	Schumann, Michael D.	Reg. No. 30,422
Goggin, Matthew J.	Reg. No. 44,125	Scull, Timothy B.	Reg. No. 42,137
Golla, Charles E.	Reg. No. 26,896	Sebald, Gregory A.	Reg. No. 33,280
Gorman, Alan G.	Reg. No. 38,472	Skoog, Mark T.	Reg. No. 40,178
Gould, John D.	Reg. No. 18,223	Spellman, Steven J.	Reg. No. 45,124
Gregson, Richard	Reg. No. 41,804	Stoll-DeBell, Kirstin L.	Reg. No. 43,164
Gresens, John J.	Reg. No. 33,112	Sumner, John P.	Reg. No. 29,114
Hamer, Samuel A.	Reg. No. 46,754	Swenson, Erik G.	Reg. No. 45,147
Hamre, Curtis B.	Reg. No. 29,165	Tellekson, David K.	Reg. No. 32,314
Harrison, Kevin C.	Reg. No. 46,759	Trembath, Jon R.	Reg. No. 38,344
Hertzberg, Brett A.	Reg. No. 42,660	Tuchman, Ido	Reg. No. 45,924
Hillson, Randall A.	Reg. No. 31,838	Tunheim, Marcia A	Reg. No. 42,189
Holzer, Jr., Richard J.	Reg. No. 42,668	Underhill, Albert L.	Reg. No. 27,403
Johnston, Scott W.	Reg. No. 39,721	Vandenburgh, J. Derek	Reg. No. 32,179
Kadieitch, Natalie D.	Reg. No. 34,196	Wahl, John R.	Reg. No. 33,044
Karjeker, Shaukat	Reg. No. 34,049	Weaver, Karrie G.	Reg. No. 43,245
Kettelberger, Denise	Reg. No. 33,924	Welter, Paul A.	Reg. No. 20,890
Keys, Jeramie J.	Reg. No. 42,724	Whipps, Brian	Reg. No. 43,261
Knearl, Homer L.	Reg. No. 21,197	Whitaker, John E.	Reg. No. 42,222
Kowalchuk, Alan W.	Reg. No. 31,535	Wickhem, J. Scot	Reg. No. 41,376

Williams, Douglas J.
Withers, James D.
Witt, Jonelle
Wu, Tong

Reg. No. 27,054
Reg. No. 40,376
Reg. No. 41,980
Reg. No. 43,361

Xu, Min S.
Zeuli, Anthony R.

Reg. No. 39,536
Reg. No. 45,255

as attorneys and/or patent agents with the full power to represent the applicant in connection with this application.

CERTIFICATE UNDER 37 C.F.R. § 3.73(b)

Gene-Cell, Inc., a corporation organized and existing under the laws of the State of Nevada, having a place of business at 1010 Hercules Avenue, Houston, Texas 77058, certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of either:

- A. ☒ An assignment from the inventor(s), of the patent application identified above.
- The assignment was recorded in the Patent and Trademark Office on , at Reel , Frame(s) , or for which a copy is attached.
- B. ☐ A chain of title from the inventor(s) of the patent application identified above to the current assignee as shown below:
1. From: To:

The document was recorded in the Patent and Trademark Office at Reel , Frame(s) , or for which a copy thereof is attached.
2. From: To:

The document was recorded in the Patent and Trademark Office at Reel , Frame(s) , or for which a copy thereof is attached.
3. From: To:

The document was recorded in the Patent and Trademark Office at Reel , Frame(s) , or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Please direct all correspondence to Denise L. Mayfield, MERCHANT & GOULD P.C., P.O. Box 2903, Minneapolis, MN 55402-0903, telephone (303)357-1660.

Date: 4/6/01

By: [Signature]
Title (if any): President & CEO





SMALL BUSINESS

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS
(37 C.F.R. 1.9(f)) - SMALL BUSINESS CONCERN**

I hereby declare that I am

- a) ☐ the owner of the small business concern identified below:
b) ☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF CONCERN: Gene-Cell, Inc.
ADDRESS OF CONCERN: 1010 Hercules Avenue
Houston, Texas
77058

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 C.F.R. 121.801-805, and reproduced in 37 C.F.R. 1.9(d), for purposes of paying reduced fees under Section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention, entitled SINGLE STRANDED END-CAPPED OLIGONUCLEOTIDE MEDIATED TARGETED GENE REPAIR AND MODIFICATION AND USES THEREOF by inventor(s) Brian Davis, David Brown, Nicole Prokophishyn described in

- a) ☐ the specification filed herewith.
b) ☐ provisional application serial no. ___, filed ___.
c) ☒ non-provisional application serial no. 09/767,775, filed January 23, 2001.
d) ☐ patent no. ___, issued ___.

If the rights held by the above-identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who could not qualify as an independent inventor under 37 C.F.R. 1.9(c) or by any concern which would not qualify as a small business concern under 37 C.F.R. 1.9(d) or a nonprofit organization under 37 C.F.R. 1.9(e).

NAME: _____
ADDRESS: _____
a) ☐ INDIVIDUAL b) ☐ SMALL BUSINESS CONCERN c) ☐ NONPROFIT ORGANIZATION

NAME: _____
ADDRESS: _____
a) ☐ INDIVIDUAL b) ☐ SMALL BUSINESS CONCERN c) ☐ NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 C.F.R. 1.27(g)(2))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereof, or any patent to which this verified statement is directed.

NAME: Brian Davis
TITLE: President
ADDRESS: Gene-Cell, Inc., 1010 Hercules Avenue, Houston, Texas 77058

SIGNATURE: Brian Davis Date: 4/6/01



23552

ASSIGNMENT

WHEREAS, we, Brian Davis, residing at 8606 Arranmore Lane, Houston TX
and David Brown, residing at 2013 Chaska Pl. Ct, League City, TX⁷⁷⁵⁷³₇₇₀₉₅, made certain new and
useful inventions and improvements for which we filed an application for Letters Patent of the United
States on January 23, 2001, application Serial No. 09/767,775 which is entitled SINGE-STRANDED
END-CAPPED OLIGONUCLEOTIDE MEDIATED TARGETED GENE REPAIR AND
MODIFICATION AND USES THEREOF.

AND WHEREAS, Gene-Cell, Inc., a corporation organized and existing under and by
virtue of the laws of the State of Nevada, and having an office and place of business at 1010 Hercules
Avenue, Houston, Texas 77058 (hereinafter "Assignee") is desirous of acquiring the entire right, title and
interest in and to said inventions, improvements and application and in and to the Letters Patent to be
obtained therefor;

NOW THEREFORE, to all whom it may concern, be it known that for good and valuable
considerations, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and
transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns,
the entire right, title and interest for all countries in and to all inventions and improvements disclosed in
the aforesaid application, and in and to the application, all divisions, continuations, or renewals thereof,
all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in
and to any and all applications which have been or shall be filed in any foreign countries for Letters
Patent on the inventions and improvements, including an assignment of all rights under the provisions of
the International Convention, and all Letters Patent of foreign countries which may be granted therefrom;
and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all
United States Letters Patent for the aforesaid inventions and improvements to the Assignee as the
assignee of the entire right, title and interest in and to the same, for the use of the Assignee, its successors
and assigns.

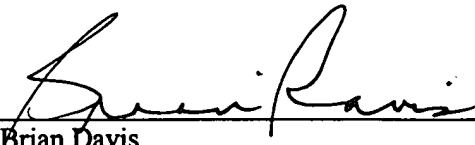
AND, for the consideration aforesaid, we do hereby agree that we and our executors and
legal representatives will make, execute and deliver any and all other instruments in writing including any
and all further application papers, affidavits, assignments and other documents, and will communicate to
said Assignee, its successors and representatives all facts known to us relating to said improvements and
the history thereof and will testify in all legal proceedings and generally do all things which may be

necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 4th day of

May, 2001.



Brian Davis

IN TESTIMONY WHEREOF, I have hereunto set my hand this 4th day of

May, 2001.

David B. Brown
David Brown

*2355
2*